



UNITED STATES PATENT AND TRADEMARK OFFICE

el

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/064,129	06/13/2002	Anant Achyut Setlur	RD-28679	3223
------------	------------	---------------------	----------	------

6147 7590 02/08/2006

GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
PATENT DOCKET RM. BLDG. K1-4A59
NISKAYUNA, NY 12309

EXAMINER

HODGES, MATTHEW P

ART UNIT	PAPER NUMBER
----------	--------------

2879

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/064,129	Applicant(s) SETLUR ET AL.	
	Examiner Matt P. Hodges	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 November 2005.
- 2a) This action is FINAL.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 29 is/are allowed.
- 6) Claim(s) 7-17, 19-22, 24-28, 30, 31, 33, 34, 36-39, 41, 42, 44-47, 49, 50, 52-55, 57, 59-61, 63 and 65-84 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 June 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

Art Unit: 2879

DETAILED ACTION

Response to Amendment

The Amendment, filed on 11/10/2005, has been entered and acknowledged by the Examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-17, 19-22, 24-28, 30, 31, 33, 34, 36-39, 41, 42, 44-47, 49, 50, 52-55, 57, 59-61, 63, and 65-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al. (US 6,153,971).

Regarding claims 7-11, 14-17, 19-22, 24-28, 30, 31, 33, 34, 36-39, 41, 42, 44-47, 49, 50, 52-55, 68-71, and 74-81, Shimizu discloses a gas discharge lamp including a tube filled with mercury vapor. The tube is coated with a phosphor blend including selections among the following phosphors $\text{LaPO}_4:\text{Ce}$, Tb , $\text{Y}_2\text{O}_3:\text{Eu}$, $\text{Y}_3\text{Al}_5\text{O}_{12}:\text{Ce}$, $2\text{SrO}_{(1-n)}\text{P}_2\text{O}_5\text{nB}_2\text{O}_3:\text{Eu}$, $3.5\text{MgO}0.5\text{MgF}_2\text{GeO}_2:\text{Mn}$, $(\text{Sr}, \text{Ca}, \text{Ba})_5(\text{PO}_4)_3\text{Cl}:\text{Eu}$, $\text{Sr}_4\text{Al}_{14}\text{O}_{25}:\text{Eu}$ (The reference includes a typographical error – the phosphor should read as listed here), and $\text{GdMgB}_5\text{O}_{10}:\text{Ce}$, Mn (Column 10 lines 10-20, Column 17 lines 30-35 and lines 50-57, Column 18 lines 20-27, and Column 19 lines 25-35 and lines 60-65). It is noted that the mercury discharge tube of this type

Art Unit: 2879

emits UV radiation primarily at around 254nm and 405nm. The phosphor blend is likewise sensitive to this wavelength.

Regarding claims 12, 13, 72, and 73, Shimizu does not explicitly state the color coordinates of the white light however color coordinates of a phosphor blend are an inherent property of the blend itself. In this case the color coordinates are substantially close to the reference color of a black body locus.

Regarding claims 57, 59-61, and 82, Shimizu does not explicitly state the CRI range of the end phosphor blend however the CRI is an inherent property of the blend itself. In this case the phosphor blend would ideally have a CRI of greater than 80.

Regarding claim 63, 65-67, 83, and 84, Shimizu does not explicitly state the CCT range of the end phosphor blend however the CCT is an inherent property of the blend itself. In this case the CCT would be less than 6500K and greater than 2700K.

Allowable Subject Matter

Claims 29 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 29, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 29, and specifically comprising the limitation of a phosphor blend of the stated phosphors where the phosphor blend absorbs EM radiation in a range from about 200nm to 400nm. See applicant's response filed 12/14/2004 for further explanation.

Conclusion

As allowable subject matter has been withdrawn, prosecution has been reopened and this action is made non-final.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt P Hodges whose telephone number is (571) 272-2454. The examiner can normally be reached on 7:30 AM to 4:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mph 


NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Continuation of Disposition of Claims: Claims pending in the application are 7-17,19-22,24-31,33,34,36-39,41,42,44-47,49,50,52-55,57,59-61,63 and 65-84.